Patent Claims

1.   A   method   for   interchanging   data   between   an
external   device   (ISP)   and   applications   installed   on
network   elements   (PC)   of   a   packet-switching   network
using at least one tunnel connection,
-        in which each network element (PC) is connected to
         a network node device (ROU),
-        in which the network node device (ROU) is involved
         in the tunnel connection, and
-        in which   the   network-end   terminal   point   of   the
         tunneled connection is allocated a global address
         uniquely,
with the network node device (ROU) forming the network-
end terminal point of the tunnel connection when there
are a plurality of network elements (PC) with joint use
of the tunnel connection,
characterized
in that if one of the network elements (PC) requires a
global address for executing an application it sets up
a tunnel connection and forms the latter's network-end
terminal point, this tunnel connection being used only
by this network element (PC), and all tunneled data
being routed through the network node device (ROU).

2.   The method as claimed in claim 1,
characterized
in that the network node device (ROU) may alternately
or simultaneously be a terminal point or a data-routing
entity of a tunnel connection and/or of a plurality of
tunnel connections.

3.   The   method   as   claimed   in   one   of   the   preceding
claims,
characterized
in that the tunnel connection is a connection which
operates on the basis of the PPTP tunneling protocol
and

- 17a -

which transmits the data in a tunneled connection without influence.

- 18 -

4.   The method as claimed in one of the preceding claims,
characterized
in that the network elements (PC) are PCs and the
5 external device (ISP) is an Internet service provider
connected by means of a DSL modem (MODEM).

5.   The method as claimed in one of the preceding
claims,
10 characterized
in that the network elements (PC) have associated local
addresses which are unique only in the packet-switching
network (LAN).

15 6.   The method as claimed in one of the preceding
claims,
characterized
in that the network node device (ROU) is a router which
has an entity for setting up and operating a PPTP
20 tunnel connection.

7.   A network node device which is involved in the
interchange of data using at least one tunnel
connection between an external device (ISP) and
25 applications installed on network elements (PC) of a
packet-switching network,
-      in which each network element (PC) is connected to
       a network node device (ROU), and
-      in which the network-end terminal point of the
30   tunneled connection has a uniquely allocated
       global address,
with the network node device (ROU) forming the network-
end terminal point of the tunnel connection when there
are a plurality of network elements (PC) with joint use
35 of the tunnel connection,
characterized
in that if one of the network elements (PC) requires a

- 18a -

global address for executing an application it can set
up a tunnel connection and then forms the latter's
network-end terminal point, this tunnel connection
being able to be used only by this network element
5   (PC),

and all data being routed through the network node device (ROU).